

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

IN THE CLAIMS

A complete listing of all claims in this application is set forth below.

Claim 1. (Currently amended) A fracture repair system for engagement with a bone having a condylar portion and a shaft portion, the system comprising: a plate including a head portion and a body portion, the head portion having an internal wall defining a head hole therethrough and adapted for cooperation with the condylar portion, the body portion having an internal wall defining a body hole therethrough; a bushing including a generally spherical exterior surface adapted for cooperation with the head hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said bushing and the head hole of said plate being configured to permit polyaxial rotation of said bushing within the head hole; a pin including ~~a cylindrical shank having a non-threaded external periphery sized for clearance passage through the passageway and into the bone and a head extending from the shank~~ a cylindrical shaft having a non-threaded external periphery terminating in a tip on a first end of the shaft and having a head extending from a second end of the shaft and sized to urge said bushing against the internal wall of the head portion of said plate to form a friction lock between said bushing and said plate in a

selected polyaxial position, said pin being positionable in an orientation extending divergently from said plate.

Claim 2. (Original) A fracture repair system as in claim 1, wherein said plate defines a surface thereof, the surface closely conforming to the bone.

Claim 3. (Previously presented) A fracture repair system as in claim 1 further comprising a body attachment component including a stem portion for passage through the body hole and into the bone and an opposed cap portion sized to cooperate with said plate.

Claim 4. (Previously presented) A fracture repair system as in claim 3: wherein the cap portion of said body attachment component is fixedly securable to said plate.

Claim 5. (Cancelled)

Claim 6. (Previously presented) A fracture repair system as in claim 3: wherein said attachment component comprises first external threads on the cap portion thereof and second external threads on the stem portion thereof.

Claim 7. (Currently amended) A fracture repair system for engagement with a bone having a condylar portion and a shaft portion, the system comprising:

a plate including a head portion and a body portion, the head portion having an internal wall defining a head hole therethrough and adapted for cooperation with the condylar portion, the body portion having an internal wall defining a first body hole and a spaced apart second body hole therethrough;

a first rigid body attachment component including a stem portion for passage through the first body hole and into the bone and an opposed cap portion adapted to rigidly cooperate with said plate;

a movable body attachment component including a stem portion for passage through the second body hole and into the bone and an opposed cap portion adapted to cooperate with said plate;

a bushing including a generally spherical exterior surface adapted for cooperation with the head hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said bushing and the head hole of said plate being configured to permit polyaxial rotation of said bushing within the head hole; and

a pin including ~~a cylindrical shank having a non-threaded external periphery sized for clearance passage through the passageway and into the bone and a head extending from the shank~~ a cylindrical shaft having a non-threaded external periphery terminating in a tip on a first end of the shaft and having a head extending from a second end of the shaft and sized to urge said

bushing against the internal wall of the head portion of said plate to form a friction lock between said bushing and said plate in a selected polyaxial position, said pin being positionable in an orientation extending divergently from said plate.

Claim 8. (Original) A fracture repair system as in claim 7, wherein said plate defines a surface thereof, the surface closely conforming to the bone.

Claim 9. (Previously presented) A fracture repair system as in claim 7: wherein the stem portion of said first rigid body attachment component is sized to be in clearance with the body hole; and further comprising a second rigid body attachment component including a stem portion for passage through the body hole and into the bone and an opposed cap portion adapted to rigidly cooperate with said plate, the stem portion of said second rigid body attachment component being threadably cooperable with said plate.

Claim 10. (Cancelled)

Claim 11. (Previously presented) A fracture repair system as in claim 7, wherein the body portion of said plate adjacent the first body hole defines a first location featured for cooperating with a drill jig for guiding the attachment components and the body portion of said plate adjacent the second body hole

defines a second location featured for cooperating with the drill jig, the first location feature and the second location feature being substantially identical.

Claim 12. (Currently amended) A fracture repair system for engagement with a bone having a condylar portion and a shaft portion, the system comprising:

a plate including a head portion and a body portion, the head portion having an internal wall defining a first head hole therethrough, the body portion having a first internal wall defining a first body hole therethrough;

a first body attachment component including a stem portion for clearance passage through the first head hole and into the bone and an opposed cap portion adapted to cooperate with said plate;

a bushing including a generally spherical exterior surface adapted for cooperation with the first body hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said bushing and the first body hole of said plate being configured to permit polyaxial rotation of said bushing within the first body hole; and

a pin including ~~a cylindrical shank having a non-threaded external periphery and a head extending from the shank~~ a cylindrical shaft having a non-threaded external periphery terminating in a tip on a first end of the shaft and having a head extending from a second end of the shaft and sized to urge said bushing against the first internal wall of the head portion of said plate to form a friction lock between said bushing and said plate in a selected polyaxial.

Claim 13. (Previously presented) A fracture repair system as in claim 12: wherein the body portion of said plate further defines a second body hole therethrough; and further comprising a body attachment component including a stem portion for passage through the second body hole and into the bone and an opposed cap portion adapted to cooperate with said plate.

Claim 14. (Previously presented) A fracture repair system as in claim 13, wherein the body portion of said plate adjacent the first body hole defines a first location featured for cooperating with a drill jig for guiding the attachment components and the body portion of said plate adjacent the second body hole defines a second location featured for cooperating with the drill jig, the first location feature and the second location feature being substantially identical.

Claim 15. (Original) A fracture repair system as in claim 12, wherein said plate defines a surface thereof, the surface closely conforming to the bone.

Claim 16. (Previously presented) A fracture repair system as in claim 12: wherein the head portion of said plate has a second internal wall defining a second head hole therethrough and adapted for cooperation with the condylar portion; further comprising a second bushing including a generally spherical exterior surface adapted for cooperation with the second head hole and an opposed interior surface defining a passageway therethrough, the exterior

surface of said second bushing and the second head hole of said plate being configured to permit polyaxial rotation of said second bushing within the second head hole; and further comprising a head attachment component including a distal portion sized for clearance passage through the passageway and into the bone and an opposed proximate portion sized to urge said second bushing against the second internal wall of said plate to form a friction lock between said second bushing and said plate in a selected polyaxial position, said head attachment component being positionable in an orientation extending divergingly from said pin.

Claim 17. (Currently amended) A fracture repair system for engagement with a bone, the system comprising:

a plate including a portion having a first internal wall defining a first hole and a spaced apart second internal wall defining a second hole therethrough;

a first bushing including a generally spherical exterior surface adapted for cooperation with the first hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said first bushing and the first hole of said plate being configured to permit polyaxial rotation of said first bushing within the first hole;

a first pin including a ~~cylindrical shank having a non-threaded external periphery and a head extending from the shank~~ cylindrical shaft having a non-threaded external periphery terminating in a tip on a first end of the shaft and having a head extending from a second end of the shaft and sized to urge said

first bushing against the first internal wall of the portion of said plate to form a friction lock between said first bushing and said plate in a selected polyaxial position;

a second bushing including a generally spherical exterior surface adapted for cooperation with the second hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said second bushing and the second hole of said plate being configured to permit polyaxial rotation of said second bushing within the first hole; and

a second pin including a cylindrical shank having a non-threaded external periphery and a head extending from the shank and sized to urge said second bushing against the second internal wall of said plate to form a friction lock between said second bushing and said plate in a selected polyaxial position, said second pin being positionable in an orientation extending divergently from said first pin.

Claim 18. (Original) A fracture repair system as in claim 17, wherein said plate defines a surface thereof, the surface closely conforming to the bone.

Claim 19. (Cancelled)

Claim 20. (Previously presented) A fracture repair system as in claim 17:
wherein said plate defines a third hole therethrough; and
further comprising a third bushing including a generally spherical exterior surface adapted for cooperation with the third hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said third bushing and the third hole of said plate being configured to permit polyaxial rotation of said bushing within the third hole; and further comprising an attachment component including a distal portion sized for clearance passage through the passageway and into the bone and an opposed proximate portion sized to urge said third bushing against the third internal wall of said plate to form a friction lock between said bushing and said plate in a selected polyaxial position, said head attachment component being positionable in an orientation extending divergingly from at least one of said first pin and said second pin.

Claim 21. (Cancelled)

Claim 22. (Currently amended) A joint fracture system for use with joint having adjoining first and second long bones, said system comprising:

a first plate for cooperation with the first long bone, the first plate having an internal wall defining a first plate hole therethrough;

a first bushing including a generally spherical exterior surface adapted for cooperation with the first plate hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said first bushing and the first plate hole of said first plate being configured to permit polyaxial rotation of said first bushing within the first plate hole;

a first pin including ~~a cylindrical shank having a non-threaded external periphery and a head extending from the shank~~ cylindrical shaft having a non-threaded external periphery terminating in a tip on a first end of the shaft and having a head extending from a second end of the shaft and sized to urge said first bushing against the internal wall of said first plate to form a friction lock between said first bushing and said first plate in a selected polyaxial position;

a second plate for cooperation with the second long bone, the second plate having an internal wall defining a second plate hole therethrough;

a second bushing including a generally spherical exterior surface adapted for cooperation with the second plate hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said second bushing and the second plate hole of said second plate being configured to permit polyaxial rotation of said second bushing within the second plate hole; and

a second pin including a cylindrical shank having a non-threaded external periphery and a head extending from the shank and sized to urge said second bushing against the internal wall of said second plate to form a friction lock between said second bushing and said second plate in a selected polyaxial position, said second pin being positionable in an orientation extending divergently from said first pin.

Claim 23. (Previously presented) A joint fracture repair system as in claim 22, wherein one of said first plate and said second plate defines a surface thereof, the surface closely conforming to the bone.

Claim 24. (Previously presented) A joint fracture repair system as in claim 22: wherein one of said first plate and said second plate has a second internal wall defining a third hole; and further comprising rigid body attachment component including a stem portion for passage through the second hole and into the bone and an opposed cap portion adapted to rigidly cooperate with one of said first plate and said second plate, the stem portion of said second rigid body attachment component threadably cooperates with one of said first plate and said second plate.

Claim 25. (Previously presented) A fracture repair system as in claim 22:
wherein one of said plates has ~~ana~~ a second internal wall defining a third
plate hole therethrough; and

further comprising a third bushing including a generally spherical exterior
surface adapted for cooperation with the third plate hole and an opposed interior
surface defining a passageway therethrough, the exterior surface of said third
bushing and the head hole being configured to permit polyaxial rotation of said
third bushing within the third plate hole; and further comprising a head
attachment component including a distal portion sized for clearance passage
through the passageway of said third bushing and into the bone and an opposed
proximate portion sized to urge said third bushing against said one of said plates
to form a friction lock between said third bushing and said one of said plates in a
selected polyaxial position, said head attachment component being positionable
in an orientation extending divergingly from at least one of said first pin and said
second pin.

Claim 26. (Previously presented) A fracture repair system as in claim 22,
wherein at least one of said first plate and said second plate defines a third plate
hole, the third plate hole adapted for cooperation with a rigid body attachment
component to provide rigid attachment of said one of said plates to said
component to avoid movement of said plate with respect to the bone as the joint
is moved.

Claim 27. (Previously presented) A fracture repair system as in claim 22, wherein at least one of said first plate and said second plate defines an end thereof, the end having a tapered shape to assist in percutaneous insertion of said one of said plates into an implanting position adjacent one of the long bones.

Claims 28 and 29. (Cancelled)

Claim 30. (Currently amended) A fracture repair system for engagement with a bone having a condylar portion and a shaft portion, the system comprising:

a plate including a head portion and a body portion, the head portion having an internal wall defining a head hole therethrough and adapted for cooperation with the condylar portion, the body portion having an internal wall defining a body hole therethrough and adapted for cooperation with the shaft portion;

a bushing including a generally spherical exterior surface adapted for cooperation with one of the body hole and the head hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said bushing and the one of the body hole and the head hole of said plate being configured to permit polyaxial rotation of said bushing within the one of the body hole and the head hole; and

a first pin including a ~~cylindrical shank having a non-threaded external periphery and a head extending from the shank~~ cylindrical shaft having a non-threaded external periphery terminating in a tip on a first end of the shaft and having a head extending from a second end of the shaft and sized to urge said bushing against the internal wall of one of the body portion and the head portion, said plate configured to form a friction lock between said bushing and said plate in a selected polyaxial position.

Claim 31. (Original) A fracture repair system as in claim 30, wherein said plate defines a surface thereof, the surface closely conforming to the bone.

Claim 32. (Previously presented) A fracture repair system as in claim 30, further comprising a second pin including a distal portion sized for passage through the other of the head hole and the body hole and into the bone and an opposed proximate portion sized to rigidly secure to the internal wall of the other of the head hole and the body hole, the distal portion being generally cylindrical and having a smooth periphery.

Claim 33. (Previously presented) A fracture repair system as in claim 30, further comprising an attachment component having first external threads on the proximate portion thereof and second external threads on the distal portion thereof, the distal portion sized for passage through the other of the head hole and the body hole and into the bone.

Claims 34 and 35. (Cancelled)

Claim 36. (New) A fracture repair system for engagement with a bone, the system comprising:

a plate including a first internal wall defining a first hole therethrough, the plate including a surface thereof adapted for cooperation with the bone;

a first hole bushing including a generally spherical exterior surface adapted for cooperation with the hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said bushing and the hole of said plate being configured to permit polyaxial rotation of said bushing within the hole; and

a first hole pin including a cylindrical shaft having a non-threaded external periphery terminating in a tip on a first end of the shaft and having a head extending from a second end of the shaft and sized to urge said bushing against the internal wall of said plate, said plate configured to form a friction lock between said bushing and said plate in a selected polyaxial position.

Claim 37. (New) The fracture repair system of claim 36:

wherein said plate further includes a second internal wall defining a second hole therethrough;

the plate further comprising a second hole bushing including a generally spherical exterior surface adapted for cooperation with the second hole and an opposed interior surface defining a passageway therethrough, the exterior surface of said second hole bushing and the second hole of said plate being

configured to permit polyaxial rotation of said second hole bushing within the second hole; and

the plate further comprising a second hole pin including a cylindrical shaft having a non-threaded external periphery terminating in a tip on a first end of the shaft and having a head extending from a second end of the shaft and sized to urge said second hole bushing against the internal wall of said plate, said plate configured to form a friction lock between said second hole bushing and said plate in a selected polyaxial position.

Claim 38. (New) The fracture repair system of claim 37, wherein said second hole pin is positionable in an orientation extending divergently from said first hole pin.